



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,925	12/07/2001	Toshiyuki Mima	791 176	5613

25191 7590 09/17/2003

BURR & BROWN
PO BOX 7068
SYRACUSE, NY 13261-7068

EXAMINER

KOSOWSKI, ALEXANDER J

ART UNIT	PAPER NUMBER
----------	--------------

2125

DATE MAILED: 09/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

24

Office Action Summary

Application No.

10/010,925

Applicant(s)

MIMA, TOSHIYUKI

Examiner

Alexander J Kosowski

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 8-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

- 1) Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7, drawn to a method for running an electric energy storage system, classified in class 700, subclass 296.
 - II. Claims 8-14, drawn to a method for running an electric energy storage system involving contracts, classified in class 705, subclass 412.
- 2) The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as a battery back-up system for electricity failure. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

During a telephone conversation with Stephen Burr on 8/15/2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-7. Affirmation of this election must be made by applicant in replying to this Office action. Claims 8-14 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 3) Claims 1-7 are presented for examination.

Specification

- 4) The disclosure is objected to because of the following informalities:

Referring to page 9, line 18, the word “cheep” should be replaced with --cheap--.

Referring to page 37, line 3, the word “patter” should be replaced with --pattern--.

Referring to page 37, line 22, the phrase “There sometimes cause an unexpected situation” does not make grammatical sense.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

- 5) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 6) Claims 1-2 and 4-6 are rejected under 35 U.S.C. 102(e) as being unpatentable by Fukui et al (U.S. PGPUB 2001/0025209).

Referring to claim 1, Fukui teaches a method for running an electric energy storage system which is set up at an electric energy consumer (Paragraph 0045) and capable of controlling an electric energy to be purchased by the electric energy consumer by controlling charge and discharge (Paragraph 0047), wherein a running pattern of charge and discharge of the electric energy storage system is previously programmed, and the run of the electric energy storage system is controlled on the basis of the previously programmed running pattern (Paragraph 0011 and Paragraph 0055 and Figure 7).

Referring to claim 2, Fukui teaches that the programmed running pattern is input in a computer control means to control the run of the electric energy storage system by the computer-control means on the basis of the programmed running pattern (Paragraph 0011 and Paragraph 0055, whereby it is noted that the demand control apparatus is considered computer control means).

Referring to claim 4, Fukui teaches that an electric fee is always optimized by observing information on purchase of electric power by the electric energy consumer with a communication means and giving instruction to correct running conditions of the electric power storage system (Paragraph 0057 and Paragraph 0011).

Referring to claim 5, Fukui teaches that a scale of the electric energy storage system to be introduced is determined so that an electric energy consumption peak is not generated by shaving the electric energy consumption peak in a time zone having the highest peak of electric energy consumption in a situation of electric energy consumption by the electric energy consumer by increasing an amount of consumable electric energy by discharge running of the electric energy storage system and by charge running of the electric energy storage system in the other time zones (Paragraph 0052 and Paragraph 0055).

Referring to claim 6, Fukui teaches that the scale of the electric energy storage system to be introduced is determined so that an electric fee is reduced by increasing a rate of electric energy purchased by the electric energy consumer in a night time zone by discharge running of the electric energy storage system in a daytime zone and charge running of the electric energy storage system in a nighttime zone (Paragraphs 0052, 0055, and 0059).

Art Unit: 2125

7) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8) Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukui.

Referring to claim 3, Fukui teaches the method above. However, Fukui does not explicitly teach that the running pattern is programmed so that a consumption rate of electric energy stored in the electric energy storage system becomes 80% or more.

It is respectfully submitted that the consumption rate of electric energy stored in the electric energy storage system could be any percentage, including 80%, and the skilled artisan would have found it an obvious modification make the consumption rate 80% or more in the method taught by Fukui with the motivation that a high consumption rate would allow for less dependence on power directly from utility suppliers, particularly during high rate times, which would provide a cost savings.

9) Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukui, further in view of Suzuki et al (U.S. Pat 6,487,508).

Referring to claim 7, Fukui teaches the method above. However, Fukui does not explicitly teach that the electric energy storage system is a system using a sodium sulfur battery.

Suzuki teaches an energy supply system whereby sodium sulfur batteries are used to store excessive power that is produced (col. 3 lines 32-45).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize sodium sulfur batteries in the method taught by Fukui since these could be

Art Unit: 2125

used to store excessive power produced during nighttime and discharge the power during the daytime (Suzuki, col. 5 lines 6-16).

Conclusion

10) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ishimaru (U.S. Pat 5,432,710) – teaches an energy supply system.

11) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander J Kosowski whose telephone number is 703-305-3958. The examiner can normally be reached on Monday through Friday, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 703-308-0538. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. In addition, the examiner's RightFAX number is 703-746-8370.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Alexander J. Kosowski
Patent Examiner
Art Unit 2125


ALBERT W. PALADINI
PRIMARY EXAMINER